

Los Alamos National Laboratory's Green Team Advances EO 13101 Objectives

Abstract:

The Los Alamos National Laboratory (the Laboratory) Otowi building's tenants developed a "Green Team" to advance the objectives of the Executive Order 13101. This team identified improvements that would eliminate their operations significant waste streams. They implemented recycling centers for paper, cardboard, plastic, and aluminum cans that was a model for the Laboratory. They conducted the first in a series of green purchasing products shows to educate Laboratory purchasers and wrote affirmative procurement language into the Laboratory's vendor contracts (see Figure 1). Finally, they purchased water conservation devices. The Green Team leads activities that make a vital difference at Otowi and the Laboratory.

Nomination Description:

The Green Team (see Figure 2) consists of the following Laboratory organizations: Business Operations (BUS), Human Resources (HR), Facility & Waste Operations (FWO), Environmental Stewardship Office (ESO), ARAMARK Corporation (food service contractor for the Laboratory), and Johnson Controls Northern New Mexico (JCNNM, facility support subcontractor for the Laboratory). Although protecting the

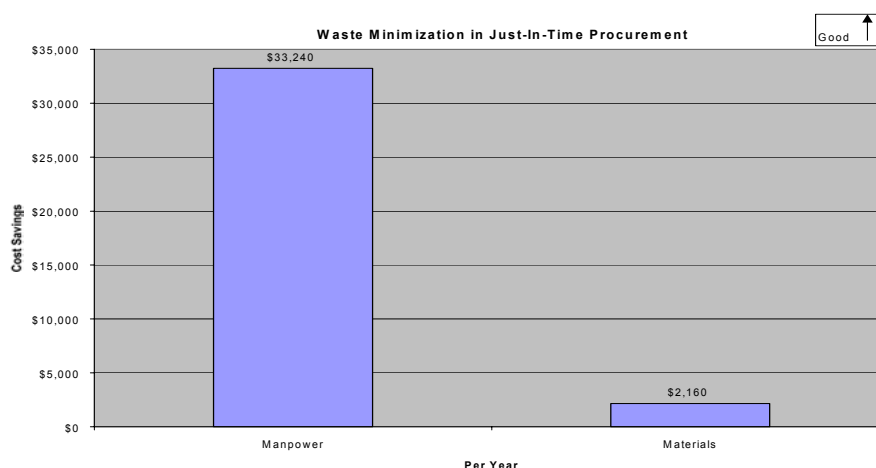


Figure 1. Cost Saving from a BUS Vendor that now Packages Items from a single order in one brown bag.

environment is part of day to day activities at the Laboratory, the examples below illustrate that the team went beyond their job duties to change the Otowi building and Laboratory culture. They are leaders committed to making a difference in their organizations and throughout the Laboratory.



Figure 2. Otowi's Green Team Front row (left to right): Josephine Caffrey, BUS-7, Christian Lopez, E-PPC, Alicia Hale, ESO, Jan Frensdorf, BUS-DO, Bruce Reed, Aramark. Second row (left to right): Bani Chatterjee, BUS-2, Dana A. Trujillo, HR-DO, Steve McCleary, FWO/DF, Jim Dalton, FWO/DF, Anthony Garcia, BUS-4. Not pictured: Camille M. Bustamante, JCNM-HENV/EXT, Stephanie Ladwig, BUS-2, Mary Erwin, BUS-1, David Rudolph, HR-5, Eleanor Chapman, ESO, and Maryann D. Montoya, BUS-1

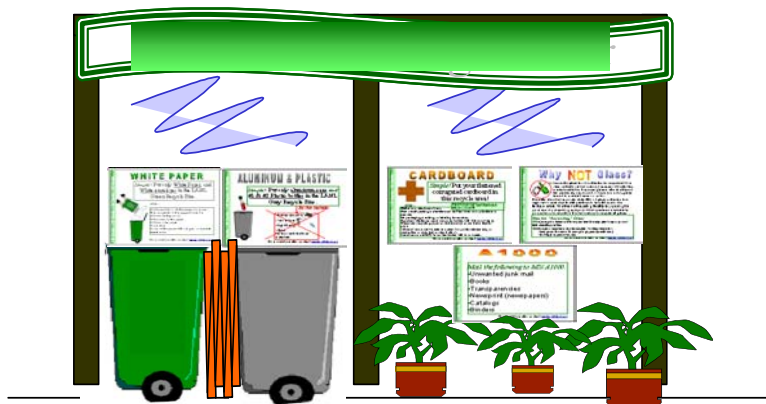


Figure 3. Otowi Recycling Center

To advance EO 13101 objectives in the area of recycling, the Otowi Green Team worked with JCNM to pilot recycling centers for paper, cardboard, plastic, and aluminum cans on each floor of the building. This is now being implemented throughout the Laboratory. This is significant because the Laboratory did not have a formal system to recycle aluminum cans and plastic. These centers will ensure that paper, cardboard, plastic, and cans are not tossed into the trash and sent to the landfill. The Otowi recycling centers are a model. The team developed signs (see Figure 3) that tell tenants how to recycle and information on which items can go to Mail Stop A-1000 (Laboratory program that recycles bulk mail and office supplies) and Stop Mail J568 (Laboratory program that eliminates unwanted junk mail). This is important because it helps employees understand how to use the Laboratory's recycle programs. The signs also show other options for recycling and reusing material at home and work. The team also developed a presentation that has been shown throughout the Otowi building and other Laboratory organizations; it communicates how to use the centers as well as other reuse/recycling ideas. Before the team was formed, Otowi tenants were recycling and reducing some of their sanitary waste. However, since formation of the team, their integrated, systematic efforts have increased recycling far more. At this time, the team has only qualitative measures of their waste minimization impact. In the near future, the Laboratory will weigh each dumpster as its emptied and Otowi will have hard numbers confirming their success. In addition, the team took the lead reducing waste at the source by 1. recycling computer disks, 2. purchasing duplex printers (have the double sided capacity), 3. setting duplex capacity on computers for double sided copying, 4. purchasing paper with recycled

content, 5. increasing purchases of printer ink cartridges that can be refilled or reused, 6. installing energy efficient light bulbs throughout the building, 7. using biodegradable peanuts, 8. reusing cardboard as packaging material), 9. reusing of surplus office supplies, and 10. installing low flow toilets in the Otowi building. BUS team members looked beyond cardboard recycling by turning cardboard into packaging material that is now used throughout the site. After using the life cycle of the cardboard, it is then recycled (see Figures 4 & 5).

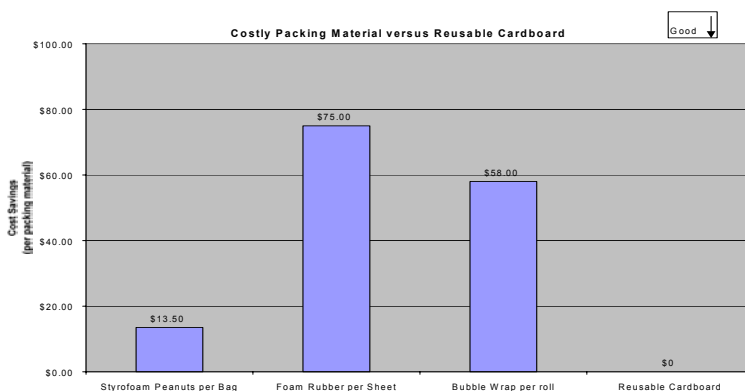


Figure 4. Cost savings by reusing cardboard

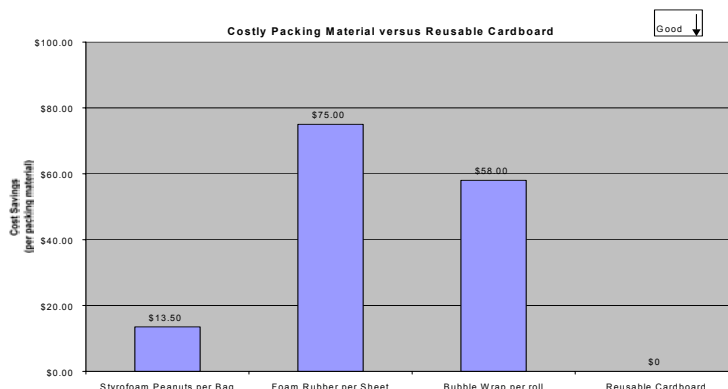


Figure 5. Costly Packaging Materials versus Reusable Cardboard

The team worked with ARAMARK cafeteria to conserve water and reduce Styrofoam cups, serving utensils, and glass by:

- initiating a Lab-wide reusable cups campaign (Lab employees purchased reusable cups for coffee and sodas and can use cups at several local restaurants);
- purchasing air cooled ice machine that eliminates water usage;
- reusing serving utensils (Laboratory employees put utensils in a plastic bag and send them to ARAMARK for washing and reuse. Mailing the used utensils back to ARAMARK resulted in cost savings of \$5,000 per year. See Figure 6);
- switching from glass to plastic bottles; and
- replacing single use salt and pepper shakers with glass.

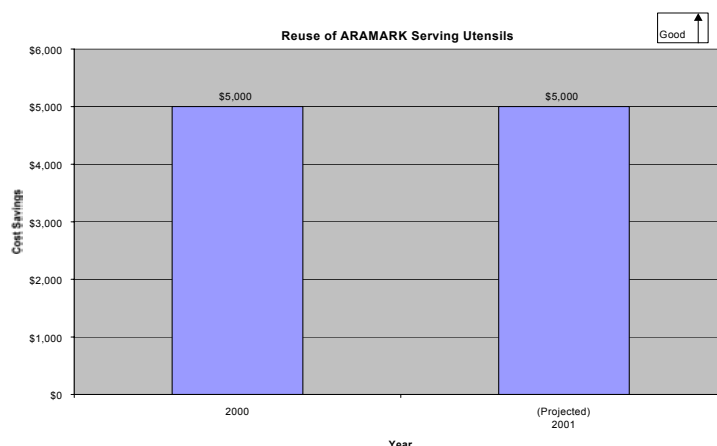


Figure 6. Reuse of ARAMARK's Utensils

The Team has taken a leadership role in changing behavior within their organization, the Otowi building, as well as throughout the Laboratory (i.e. recycle centers, reusable cup campaign, reusable serving utensils, affirmative procurement language written into vendor contracts, the green show, etc). This team will continue their efforts to lead the Laboratory towards advancing the EO 13101 objectives.

The nominated team includes: Josephine Caffrey, BUS-7, Christian Lopez, E-PPC, Alicia Hale, ESO, Jan Frensdorf, BUS-DO, Bruce Reed, ARAMARK, Bani Chatterjee, BUS-2, Dana A. Trujillo, HR-DO, Steve McCleary, FWO/DF, Jim Dalton, FWO/DF, Anthony Garcia, BUS-4, Camille M. Bustamante, JCNNM-HENV/EXT, Stephanie Ladwig, BUS-2, Mary Erwin, BUS-1, David Rudolph, HR-5, Eleanor Chapman, ESO, and Maryann D. Montoya, BUS-1. For more information, please contact Alicia Hale, Environmental Stewardship Office, (505) 667-6711, ahale@lanl.gov